



IDAHO DEPARTMENT OF HEALTH & WELFARE

Bureau of Community and Environmental Health

Mercury in Idaho's Sportfish

What is mercury?

Mercury is a metal, familiar as the silver-colored liquid in thermometers. It exists in the environment in rocks, soils, water and air. Some of the mercury in the environment is naturally occurring, and some is a result of industrial or mining discharges. There are several forms of mercury in the environment, and all are potentially toxic to humans in sufficient amounts.

How does mercury get into fish?

Most of the mercury in fish occurs in the form of methyl mercury. Mercury is converted to methyl-mercury by microorganisms present in soil, sediment and water. Methyl mercury is more soluble than other forms of mercury. Once the methyl mercury is dissolved in the water, the fish absorb it when the water passes over their gills. They can also absorb it from eating smaller fish or other creatures that are contaminated. Methyl mercury stays in fish for a long time, so the older and larger the fish becomes, the more methyl mercury it will contain.

How can I tell if the fish I catch are contaminated?

The only way to know for sure is to have the fish analyzed by a testing laboratory. Names and numbers of laboratories are listed in the yellow pages of your telephone book. The average cost of a mercury analysis is \$30.

Is there any way to remove mercury from fish?

Mercury builds up in the fish flesh and cannot be removed by special cleaning or cooking methods.

However, you can reduce the levels of mercury in the fish you eat (and also your risk of health effects) by:

- Eating smaller fish within any species since younger, smaller fish usually contain less mercury.
- Choosing non-predator fish over predator fish whenever possible since non-predator fish usually contain less mercury.
- Following consumption guidelines in fish advisories.

What are the health effects of eating fish that contain mercury?

If you consume fish that contains methyl mercury, you will not get sick right away, but if you eat the fish over a long period of time, the mercury can build up in your body. The nervous system, including the brain, is the main area of the human body affected by mercury exposure. The first noticeable effects of long-term, low-level exposure are: trembling hands, numbness of the extremities, and behavioral changes. As the level of mercury builds up in the body, a person's ability to walk, talk, see, and hear may be affected.

The effects of methyl mercury contamination are very serious. It is important that you and your family follow fish advisories to protect your health.

How does a fish advisory work?

To help you protect your health, the Idaho Division of Health issues a fish advisory when fish in a certain area are found to have methyl mercury levels of 0.5 parts per million (PPM) or greater. If you eat fish from a body of water that is known to have high levels of methyl mercury, you should make sure not to eat more than the amounts specified in the fish advisory. Also, keep in mind that only a few bodies of water in Idaho have been tested for mercury.

Why are certain people advised to eat even less fish than others?

The nervous system is especially vulnerable to the effects of mercury when it is developing. For this reason, young children (age 6 or younger), should consume smaller amounts of fish that contain mercury. Because mercury exposure is also linked to birth defects, pregnant and nursing women, and even women who are thinking of becoming pregnant in the near future, need to be especially careful. The fish advisory lists these people in a special category, with their own lower level of safe consumption.

How long do fish advisories last?

Fish advisories for health reasons are in effect indefinitely, as long as the fish contain high levels of contamination. If the source(s) of contamination can be eliminated, the fish advisory will be lifted. Some contaminants that occur naturally may never be eliminated.

Where can I get more information?

- For existing fish advisories, see “Fish Consumption Advisory” on the Bureau of Community and Environmental Health’s website.
- For information on environmental issues, contact the *Idaho Division of Environmental Quality* in Boise at 208-373-0502, or <http://www.deq.state.id.us> or contact regional offices in Coeur d’Alene, Lewiston, Boise, Twin Falls, Pocatello, and Idaho Falls.
- For a fact sheet on safely consuming fish you catch: <http://www.epa.gov/ost/fish>
- For EPA information on mercury and fish advisories: <http://www.epa.gov/ost/fish/mercury.html>
- For other information on fishing in Idaho: <http://www2.state.id.us/fishgame/fish/fish.htm>

Bureau of Community and Environmental Health (BCEH)

Environmental Health Education and Assessment
450 W. State St. 6th Floor, Boise, Idaho 83720-0036
Toll Free: 1-866-240-3553
(208) 334-0606
BCEH@idhw.state.id.us